

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1. (Original) A tip for use in a plasma arc torch comprising:

an electrically conductive body;  
a central exit orifice formed through the electrically conductive body;  
a plurality of swirl holes; and  
a plurality of secondary gas holes,

wherein the swirl holes direct a plasma gas to generate the plasma stream, the central exit orifice provides for the exit of the plasma stream, and the secondary gas holes direct a secondary gas to stabilize the plasma stream exiting the exit orifice.

2. (Original) A tip for use in a plasma arc torch comprising:

an electrically conductive body;  
a central exit orifice formed through the electrically conductive body; and  
at least one swirl passage, wherein the swirl passage directs a plasma

gas to generate a plasma stream.

3. (Original) A tip for use in a plasma arc torch comprising:

an electrically conductive body;  
a central exit orifice formed through the electrically conductive body; and

at least one swirl hole, wherein the swirl hole directs a plasma gas to generate a plasma stream.

4. (Original) A tip for use in a plasma arc torch comprising:
- an electrically conductive body;
  - a central exit orifice formed through the electrically conductive body;
  - an annular flange formed around the electrically conductive body;
  - a distal face formed on the annular flange; and
  - at least one secondary gas passage formed on the distal face,

wherein the secondary gas passage directs a secondary gas to stabilize a plasma stream that exits the tip.

5. (Original) An improved tip of the type which is used in a plasma arc torch to generate a pilot arc and provide for the exit of a plasma stream from a central exit orifice, wherein the improvement comprises:

at least one swirl hole formed in the tip to direct a plasma gas that generates the plasma stream.

6. (Original) An improved tip of the type which is used in a plasma arc torch to generate a pilot arc and provide for the exit of a plasma stream from a central exit orifice, wherein the improvement comprises:

at least one secondary gas hole formed in the tip to direct a secondary gas that stabilizes the plasma stream.

7. (New) An apparatus for use in a plasma arc torch, the apparatus comprising a single-piece body defining a plurality of plasma gas passageways and a plurality of secondary gas passageways.

8. (New) A method of operating a plasma arc torch comprising the step of maintaining a constant flow ratio of secondary gas to plasma gas across a range of operating amperages.

9. (New) The method according to Claim 8, wherein the flow ratio is approximately 2:1.